

Tower Grove Park Planthouse Range
(Park Structures Two and Three)
Tower Grove Park
4255 Arsenal Street
St. Louis
Missouri

HABS No. MO-1137-U

HABS
MO,
96-SALU,
46U-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Department of the Interior
Washington, D. C. 20240

HISTORIC AMERICAN BUILDINGS SURVEY

HABS No. MO-1137-U

TOWER GROVE PARK PLANTHOUSE RANGE
(Park Structures Two and Three)

HABS
MO,
910-SALU
4160-

Location: Headquarters at 4255 Arsenal Street, St. Louis, Missouri. Structure two is 300' and structure three is 350' south of Magnolia Avenue. Both are 300' east of the central cross drive (a continuation of Tower Grove Avenue) and are within the original boundaries of the Park.

USGS Webster Groves Quadrangle, Universal Transverse
Mercator Coordinates: 15.738790.4276560

Present Owner: The City of St. Louis.

Present Use: Storage.

Significance: These well-preserved structures are examples of the mid-nineteenth century type of planthouse, whose brick walls were abandoned in favor of totally iron and glass greenhouses in the last half of the century.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Dates of erection: The Palm House (#3) was built in 1878 (Tower Grove Park Comptroller's Report, 1875, p.148, 9/4/78); the second house (#2) was built in 1885 (Comp. 1882, p.166, 10/24/85).
2. Architect: The design is by Barnett and Taylor, and was used in the Missouri Botanical Garden Linnaean House, as well, in 1881. George I. Barnett - For further biographical information see the HABS report on Tower Grove Park (MO-1137).
3. Original and subsequent owners: City of St. Louis. For property description, see the HABS report on Tower Grove Park, (MO-1137).
4. Builder, contractor, suppliers, etc.: The Palm House foundations were laid by Picha and Yansky (Comp. 1875, p.126, 4/14/78); cut stone work was done by Richard Langwith (Comp. 1875, p.126, 4/8/78). The brickwork was done by Mickler and Doyle (Comp. 1875, p.136, 6/15/78) with material supplied by The Hydraulic Press Brick Co. costing \$917.34 (Comp. 1875, p.144, 8/10/78). The tin roofing was supplied by Hull and Cozzens (Comp. 1875, p.140, 7/27/78); the iron roof material came from Shickle, Harrison, and Co., and cost \$600 (Comp. 1875, p.142, 8/3/78). The iron door frame came from T.R. Pullis and Sons (Comp. 1875, p.142, 8/3/78). Lumber was supplied

by Philibert and Johannung (Comp. 1875, p.142 8/6/78); millwork was done by Alcott Duross and Co. (Comp. 1875, p.138, 7/6/78); the sashes were painted by O'Connell (Comp. 1875, p.134, 6/8/78).

The second planthouse was supervised and built by E. Ilsley (Comp. 1882, p.177, 10/22/85). The bricks were supplied and laid by Ittner Bros. Cut stonework was done by Richard Langwith (Comp. 1882, p.160, 10/22/85). The tin roofing and skylight were supplied by Hull and Cozzens (Comp. 1882, p.160, 10/17/85); the iron roof trusses were from Pullis Bros. (Comp. 1882, p.154, 9/16/85). Lumber and millwork were supplied by Philibert and Johannung (Comp. 1882, p.164, 11/22/85). Ribbed glass was supplied by R.A. Drew and Co. for \$70.42 (Comp. 1882, p.158, 10/10/85), while other plain glass lights were supplied by E. Voight and Co. for \$255 (Comp. 1882, p.164, 11/21/85).

5. Original plans, construction, etc.: The first Palm House cost about \$7220 (Board Minutes, 1/79, p.97). Its design was copied in the second house, which lacks the ornamental iron urns which were on the corners of the first. The first Palm House was designed to store potted palms and other exotic plants used for ornamental displays around the Sailboat Pond and Music Stand (#15), during the winter (Superintendent's Report for December 1967).

6. Alterations and additions:

Building #3. In 1965, a paint shop storage room was added to the west end of the first Palm House, which was no longer being used as a planthouse, but which had become a large equipment storage area (Superintendent's Report for December 1965). In 1967, the exterior was tuckpointed, and sheet metal repairs were made to the north side, after which interior tuckpointing and carpentry repairs were made (Superintendent's Report for November and December 1967).

Building #2. Public toilets were added to the western end of the second, or north, planthouse in 1913 (Annual Report of the Board, 1914, p.8).

In January, 1968, foundation repairs were needed in the east storage room adjoining the potting room. The walls were insulated at the same time (Superintendent's Report for January 1968). In May of the same year, the old galvanized iron roof and about 110' of cornice face molding and gutters were removed and replaced. About fifty feet of new wood nailer and backup board were used (Superintendent's Report for May 1968).

In 1970, separation of the employees' and the public toilets was completed (Superintendent's Report for February 1970). A year later shelving and additional electrical outlets were installed to accommodate the building's new function as Park workshop (Superintendent's Report for February 1971).

In November of 1972, work on enlarging the west end of the workshop was completed by reducing the size of the adjacent public rest room (Superintendent's Report for December 1972).

B. Sources of Information:

1. Old views: A late nineteenth century view from the southwest Shaw part of the planthouse range behind the sailboat pond (See HABS photocopy) is in the Tower Grove Park general repairs file).

2. Bibliography:

- a. Primary and unpublished sources:

1. Manuscripts: Henry Shaw's Comptroller Report Books 1875, 1882, and 1888; Tower Grove Park Receipts and Vouchers for 1867-1889; the Minutes of the Board of Commissioners from 1869-1898; and the Superintendent's Monthly Reports for 1960-1974 are in the custody of Park Superintendent Miss Bernice R. Gurney and probably will be transferred from her office at 4274 Magnolia Avenue to the Shaw Manuscript Collection in the John S. Lehmann Library in the Missouri Botanical Garden, 2345 Tower Grove Avenue, St. Louis, Missouri, by the end of the summer of 1974.

2. Deed Books: City Hall, Market Street, St. Louis, Missouri.

- b. Secondary and published sources:

Annual Report of the Board of Commissioners, Tower Grove Park.
St. Louis; Nixon-Jones Printing Co., 1899-1919.

_____. St. Louis: Arcade Print Shop, 1920.

_____. St. Louis: Mound City Press, 1921-1942.

_____. St. Louis: Allied Printing, 1943-1959.

"Barnett, Haynes, and Barnett," The Church Progress, (July 27, 1922), p.10.

"Barnett, Thomas P. "Pioneer Architect of the West." Western Architect, (February 1912), pp. 13-24.

Hyde, William and Howard L. Conrad, eds. "George I. Barnett." Encyclopedia of the History of St. Louis, I. St. Louis: The Southern History Co., 1899, p.98.

MacAdam, David H. Tower Grove Park. St. Louis; R-P. Studley and Company, 1883.

Shoemaker, Floyd Calvin, ed. "George I. Barnett," Missouri and Missourians: Missouri Biography, V. Chicago: The Lewis Publishing Co., 1943, p.73.

"Taylor, Isaac S.," The Book of St. Louisans. St. Louis: St. Louis Republic, 1912, pp.588-589.

"Taylor, Isaac S.," Who was Who in America, I. Chicago: A.W. Marquis Co., 1966, p.1220.

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PART II. ARCHITECTURAL INFORMATION:

A. General Statement:

1. Architectural character: These rectangular brick buildings with solid rear walls, multiple-light fronts and skylight roofs are in a classical revival style. The design and corbeled brick features of the first planthouse (No. 3), built in 1878, are similar to the Linnaean House of 1882 in the Missouri Botanical Garden and were a model for the second planthouse (No. 2), built in 1885.
2. Condition of fabric: Good.

B. Description of Exterior:

1. Over-all dimensions: Rectangular shape, nine bays (south front) by (seven bays) one story.
2. Foundations: Stone blocks.
3. Wall construction, finish and color: The red brick elements include pilasters between bays, buttresses at corners, broad cornice and dentils, and beveled brick around window and door openings. Smooth cut stone features include corners, window lintels, pilaster and buttress caps, and the pedimented entrance cornice.
4. Structural system, framing: Load bearing walls, iron roof trusses
5. Chimneys: Large smoke stack 35'-0" high (red brick) serves the furnace room under the addition at the north side of the first planthouse (#3). The chimney on the north side of the second planthouse (#2) is in the center of the fifth bay.

6. Openings:

- a. Doorways and doors: The main entrances in the center of the south sides are pedimented and flanked by pilasters. Building three has a double door with fanlight window above. Building two has a single door with painted sidelights. There are wide garage doors on the north side of building three and the east end of building two. On building three's east and west wall, and on building two's west wall, are single doors. All doors are painted green.
- b. Windows: Fronts: The nine-bay fronts have segmental windows of nine-over-nine sash. On the gable ends are seven arched windows with varying heights and sash. The upper panes of bldg. three's center arched windows in the gable ends are colored.
- c. Decoration: Building three has black ornamental iron urns on top of its corner buttresses and entrance pilasters.

7. Roof:

- a. Shape, covering: The gable roof has skylights and tin roofing.
- b. Cornice eaves: There is a brick cornice of several corbelled courses and dentils. The metal rain gutters and drainage pipe are painted red.

C. Description of Interior:

1. Floor plan: Both structures have rectangular open plans. At the west end of building two are public toilets for men and women.
2. Flooring: Concrete pad.
3. Wall and ceiling finish: The brick interior is painted white. Half of the ceiling is tongue and groove wood (white); the other half is a glass skylight.
4. Notable hardware: An iron coal stove is in the fireplace of the central bay in the north side of building two.
5. Mechanical equipment: The lighting in building three is by hanging lamps; in building two by fluorescent ceiling lights. In both planhouses there are wheel and pulley devices to open the skylights.

- D. Site: Both planhouses are in an area set aside for storage and maintenance buildings. The fronts face south, building three facing the Sailboat and Lily Ponds. The complex stands 300' east of the central cross drive and 350' south of Magnolia Avenue.

PART III. PROJECT INFORMATION

The Tower Grove Park and Missouri Botanical Garden Project was jointly sponsored by the Historic American Buildings Survey of the National Park Service, the Board of Commissioners of Tower Grove Park, and the Board of Trustees of the Missouri Botanical Gardens.

Recorded under the direction of John Poppeliers, Chief of HABS, and Kenneth L. Anderson, HABS Principal Architect, the project was conducted during the summer of 1974 and 1975 at the Historic American Buildings Survey field office at the Missouri Botanical Garden, St. Louis.

1974 Team: Robert Harvey, Project Supervisor, (Landscape Architect); Steven Bauer, Project Foreman, (architect, University of Kansas); Carolyn Hamm, project historian, (Cornell University); Patrick Ackerman, student assistant architect, (Washington University); Suzanne Fauber, student assistant landscape architect, (University of Michigan).

1975 Team: Stuart Mertz, A.S.L.A., project supervisor, (landscape architect); Steven Bauer, project foreman, (Columbia University); Peter Dessauer, project historian, (Clemson University); Lennard A. Roberts, student assistant architect, (Cornell University); John R. Temmink, student assistant architect, (University of Virginia); and Theodore Torpy, landscape architect, (WASO).

The drawings were revised by HABS architect Paul Dolinsky, and the written data were edited by HABS Architectural Historian Denys Peter Myers, in the HABS office in 1983. The photographs were taken by HABS/HAER photographer Jet Lowe in 1983.